0590
10/12   OIPE

#2

RAW SEQUENCE LISTING   DATE: 06/14/2001
PATENT APPLICATION: US/09/866,261   TIME: 11:17:20

Input Set : **N:\Crf3\RULE60\09866261.txt**
Output Set: **N:\CRF3\06142001\I866261.raw**

ENTERED

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      3 <110> APPLICANT: Johnson, Eric S.
      4         Pham, Thuy D.
W--> 5 <120> TITLE OF INVENTION: Viral Detection System
W--> 6 <130> FILE REFERENCE: D6161
      8 <140> CURRENT APPLICATION NUMBER: 09/866,261
      9 <141> CURRENT FILING DATE: 2001-05-25
     11 <150> PRIOR APPLICATION NUMBER: US 09/159,325
     12 <151> PRIOR FILING DATE: 1998-09-23
     14 <150> PRIOR APPLICATION NUMBER: US 60/061,287
     15 <151> PRIOR FILING DATE: 1997-10-07
W--> 16 <160> NUMBER OF SEQ ID: 26
     18 <210> SEQ ID NO: 1
     19 <211> LENGTH: 205
     20 <212> TYPE: DNA
     21 <213> ORGANISM: Avian leukosis/sarcoma virus of the family Retroviridae
W--> 22 <220> FEATURE:
     23 <223> OTHER INFORMATION: Subgroup A of the avian leukosis/sarcoma virus.
W--> 24 <400> SEQUENCE: 1
     25 ctacagctgt taggttccca gtctctccct aacattacta atattactca gatctccggt  60
     26 gtaaccgggg gatgcgtagg cttcaggcca aaaggggttc cttggtatct gggttggtct 120
     27 agacaggaag ccacgcggtt tctccttaga cgcccctctt tctctaactc ctcgaaaccg 180
     28 tttacagtgg tgacagcgga taggc                                      205
     30 <210> SEQ ID NO: 2
     31 <211> LENGTH: 229
     32 <212> TYPE: DNA
     33 <213> ORGANISM: Avian leukosis/sarcoma virus of the family Retroviridae
W--> 34 <220> FEATURE:
     35 <223> OTHER INFORMATION: Subgroup B of the avian leukosis/sarcoma virus.
W--> 36 <400> SEQUENCE: 2
     37 ctacaactgc taggttccca gtctctcccc aatataacta atattactcg gatccccagt  60
     38 gtggctggag gatgcatagg ctttacccca tacgatagtc cggctggtgt ctacggatgg 120
     39 gaccggagag aggttacaca catccttctg accgacccag ggaacaatcc tttctttgat 180
     40 aaggcctcta actcctcgaa accgtttaca gtagtgacag cggacaggc             229
     42 <210> SEQ ID NO: 3
     43 <211> LENGTH: 211
     44 <212> TYPE: DNA
     45 <213> ORGANISM: Avian leukosis/sarcoma virus of the family Retroviridae
W--> 46 <220> FEATURE:
     47 <223> OTHER INFORMATION: Subgroup C of the avian leukosis/sarcoma virus.
W--> 48 <400> SEQUENCE: 3
     49 ctgcagctgc taggttccca gtctctccct aacgttacta acattactca ggtctctggc  60
     50 gtggccgggg gatgtgtata tttcgcccca agggccactg gcctgttttt aggttggtct 120
     51 aaacaaggtc tctcgcggtt cctcctccgt caccccttta cctccacctc taactccacg 180
     52 gaaccgttca cggtggtgac agcggataga c                               211
     54 <210> SEQ ID NO: 4
     55 <211> LENGTH: 229
     56 <212> TYPE: DNA
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RAW SEQUENCE LISTING   DATE: 06/14/2001
PATENT APPLICATION: **US/09/866,261**   TIME: 11:17:20

Input Set : **N:\Crf3\RULE60\09866261.txt**
Output Set: **N:\CRF3\06142001\I866261.raw**

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    57 <213> ORGANISM: Avian leukosis/sarcoma virus of the family Retroviridae
W-->58 <220> FEATURE:
    59 <223> OTHER INFORMATION: Subgroup D of the avian leukosis/sarcoma virus.
W-->60 <400> SEQUENCE: 4
    61 ctgcagctgt taggctccca gtctctccct aatatcgcta atattactca gatccctggt   60
    62 gtggcaggag gatgcatagg cttcacccca tacggcagtc cggctggtgt ttacgggtgg  120
    63 ggccgggaag aggtgacaca catcctctta accaacccccc ctgataatcc tttctttaac 180
    64 cgtgcttcta actccacgga accgtttacg gtggtgacag cggataggc              229
    66 <210> SEQ ID NO: 5
    67 <211> LENGTH: 228
    68 <212> TYPE: DNA
    69 <213> ORGANISM: Avian leukosis/sarcoma virus of the family Retroviridae
W-->70 <220> FEATURE:
    71 <223> OTHER INFORMATION: Subgroup E of the avian leukosis/sarcoma virus.
W-->72 <400> SEQUENCE: 5
    73 ctacagctgc taggttccca gtctctccct aacattacta atattactca gatttctggt   60
    74 gtaaccgggg gatgcgtagg cttcgcccca cactccaatc caagtggtgt ctacgggtgg  120
    75 ggccggagac aggttacaca caacttcttg atcgccccgt gggtcaatcc tttctttaac  180
    76 agcgcttcta actccacgga accgttacgg tggtgacagc ggataggc               228
    78 <210> SEQ ID NO: 6
    79 <211> LENGTH: 202
   ·80 <212> TYPE: DNA
    81 <213> ORGANISM: Single Comb White Leghorn chicken
W-->82 <220> FEATURE:
    83 <223> OTHER INFORMATION: PCR product Fb2, or 2F, isolated from egg albumin of ALSV-
    84       positive stock F chicken
W-->85 <400> SEQUENCE: 6
    86 acagctgtta ggttcccagt ttttcctcac attattaata ttactcaaat ttctggtgta   60
    87 accggaggag gcgtaggctt tagaccagga gggatcccct ggtatatagg atggactaga  120
    88 caggaagcca cacggttcct ccttagacaa tcctcctttt ctaattccac ggaaccattt  180
    89 acggtggtga cagcggatag gc                                           202
    91 <210> SEQ ID NO: 7
    92 <211> LENGTH: 22
    93 <212> TYPE: DNA
    94 <213> ORGANISM: artificial sequence
W-->95 <220> FEATURE:
    96 <221> NAME/KEY: primer_bind
    97 <223> OTHER INFORMATION: Forward primer PA1 specific for the detection of viral
    98       subgroup A of avian/leukosis sarcoma virus.
W-->99 <400> SEQUENCE: 7
   100 ctacagctgt taggttccca gt                      22
   103 <210> SEQ ID NO: 8
   104 <211> LENGTH: 21
   105 <212> TYPE: DNA
   106 <213> ORGANISM: artificial sequence
W-->107 <220> FEATURE:
   108 <221> NAME/KEY: primer_bind
   109 <223> OTHER INFORMATION: Reverse primer PA2 specific for the detection of viral
   110       subgroup A of avian/leukosis sarcoma virus.
```

RAW SEQUENCE LISTING   DATE: 06/14/2001
PATENT APPLICATION: US/09/866,261   TIME: 11:17:20

Input Set : **N:\Crf3\RULE60\09866261.txt**
Output Set: **N:\CRF3\06142001\I866261.raw**

W--> **111 <400> SEQUENCE: 8**
    112 gcctatccgc tgtcaccact g   21
    114 <210> SEQ ID NO: 9 .
    115 <211> LENGTH: 202
    116 <212> TYPE: DNA
    117 <213> ORGANISM: Single Comb White Leghorn chicken
W--> **118 <220> FEATURE:**
    119 <223> OTHER INFORMATION: RT-PCR product from egg albumin of stock 2F chicken.
W--> **120 <400> SEQUENCE: 9**
    121 acagctgtta ggttcccagt ttttccctca cattataata ttactcaaat ttctggtgta 60
    122 accggaggag gcgtaggctt tagaccagga gggatccct ggtatatagg atggactaga 120
    123 caggaagcca cacggttcct ccttagacaa tcctcctttt ctaattccac ggaaccattt 180
    124 acggtggtga cagcggatag gc   202
    126 <210> SEQ ID NO: 10
    127 <211> LENGTH: 226
    128 <212> TYPE: DNA
    129 <213> ORGANISM: Single Comb White Leghorn chicken
W--> **130 <220> FEATURE:**
    131 <223> OTHER INFORMATION: RT-PCR product from egg albumin of stock 6F chicken.
W--> **132 <400> SEQUENCE: 10**
    133 cagctgttag gttcccagtc tctccctaac attactaata ttactcagat ttctggtgta 60
    134 actgggggat gcgtaggctt caccccacac tccaatccaa gtggtgttta cgggtggggc 120
    135 cggagacagg ttacacacaa cctcttgatc gccccgtggg tcaatccttt ctttaacagc 180
    136 gcttctaact ccacggaacc gtttacggtg gtgacagcgg ataggc   226
    138 <210> SEQ ID NO: 11
    139 <211> LENGTH: 225
    140 <212> TYPE: DNA
    141 <213> ORGANISM: Single Comb White Leghorn chicken
W--> **142 <220> FEATURE:**
    143 <223> OTHER INFORMATION: RT-PCR product from egg albumin of stock 7Q chicken.
W--> **144 <400> SEQUENCE: 11**
    145 cagctgttag gttcccagtt tctccctaac attattaata ttactcagat ttctggtgta 60
    146 actgggggat gcgtaggctt caccccacac tccaatccaa gtggtgttta cgggtggggc 120
    147 cggagacagg ttacacacaa cttcttgatc gccccgtggg tcaatccttt ctttaacagc 180
    148 gcttctaact ccacggaacc gtttacggtg gtgacagcgg atagg   225
    150 <210> SEQ ID NO: 12
    151 <211> LENGTH: 229
    152 <212> TYPE: DNA
    153 <213> ORGANISM: Single Comb White Leghorn chicken
W--> **154 <220> FEATURE:**
    155 <223> OTHER INFORMATION: RT-PCR product from egg albumin of stock 10Q chicken.
W--> **156 <400> SEQUENCE: 12**
    157 ctacagctgt taggttccca gtctctccct aacattacta atattactca gatttctggt 60
    158 gtaaccgggg gatgcgtagg cttcgcccca cactccaatc caagtggtgt ctacgggtgg 120
    159 ggccggagac aggttacaca caacttcttg atcgccccgt gggtcaatcc tttctttaac 180
    160 agcgcttcta actccacgga accgtttacg gtggtgacag cggataggc   229
    162 <210> SEQ ID NO: 13
    163 <211> LENGTH: 224
    164 <212> TYPE: DNA

RAW SEQUENCE LISTING   DATE: 06/14/2001
PATENT APPLICATION: **US/09/866,261**   TIME: 11:17:20

Input Set : **N:\Crf3\RULE60\09866261.txt**
Output Set: **N:\CRF3\06142001\I866261.raw**

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       165 <213> ORGANISM: unknown
W-->   166 <220> FEATURE:
       167 <223> OTHER INFORMATION: RT-PCR product from egg albumin of commercial chicken from
       168       randomly chosen grocery store # 205.
W-->   169 <400> SEQUENCE: 13
       170 gctgttaggt tcccagtctc tccctaacat tactaatatt actcagattt ctggtgtaac   60
       171 cgggggatgc gtaggcttca ccccacactc caatccaagt ggtgtttacg ggtggggccg  120
       172 gagacaggtt acacacaact tcttgatcgc cccgtgggtc aatcctttct ttaacagcgc  180
       173 ttctaactcc acggaaccgt ttacggtggt gacagcggat aggc                    224
       175 <210> SEQ ID NO: 14
       176 <211> LENGTH: 203
       177 <212> TYPE: DNA
       178 <213> ORGANISM: unknown
W-->   179 <220> FEATURE:
       180 <223> OTHER INFORMATION: RT-PCR product from egg albumin of commercial chicken from
       181       randomly chosen grocery store # 65.
W-->   182 <400> SEQUENCE: 14
       183 tacagctgtt aggttcccag tctctcccta acattactaa catactcaaa tttctggtgt   60
       184 aaccggagga tgcgtaggct ttagaccagg agggatcccc tggtatatgg gatggactag  120
       185 acaggaagcc acacggttcc tccttaaaca atcctccttt tctaattcca cggaaccatt  180
       186 tacggtggtg acagcggata ggc                                         203
       188 <210> SEQ ID NO: 15
       189 <211> LENGTH: 21
       190 <212> TYPE: DNA
       191 <213> ORGANISM: artificial sequence
W-->   192 <220> FEATURE:
       193 <221> NAME/KEY: primer_bind
       194 <222> LOCATION: 5564..5585
       195 <223> OTHER INFORMATION: Forward primer PU1 specific for the detection of viral
       196       subgroup A-E of avian/leukosis sarcoma virus. Position
       197       corresponds to the numbering of the RNA genome of the
       198       Prague C strain of RSV.
W-->   199 <400> SEQUENCE: 15
       200 ctrcarctgy taggytccca g                 21
       202 <210> SEQ ID NO: 16
       203 <211> LENGTH: 21
       204 <212> TYPE: DNA
       205 <213> ORGANISM: artificial sequence
W-->   206 <220> FEATURE:
       207 <221> NAME/KEY: primer_bind
       208 <222> LOCATION: 5772..5791
       209 <223> OTHER INFORMATION: Reverse primer PU2 specific for the detection of viral
       210       subgroup A-E of avian/leukosis sarcoma virus. Position
       211       corresponds to the numbering of the RNA genome of the
       212       Prague C strain of RSV.
W-->   213 <400> SEQUENCE: 16
       214 gycaycactg tcgcctrtcc g                 21
       216 <210> SEQ ID NO: 17
       217 <211> LENGTH: 20
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RAW SEQUENCE LISTING   DATE: 06/14/2001
PATENT APPLICATION: US/09/866,261   TIME: 11:17:20

Input Set : N:\Crf3\RULE60\09866261.txt
Output Set: N:\CRF3\06142001\I866261.raw

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     218 <212> TYPE: DNA
     219 <213> ORGANISM: artificial sequence
W--> 220 <220> FEATURE:
     221 <221> NAME/KEY: primer_bind
     222 <222> LOCATION: 5642..5661
     223 <223> OTHER INFORMATION: Forward primer PA10 specific for the detection of viral
     224       subgroup A of avian/leukosis sarcoma virus. Position
     225       corresponds to the numbering of the RNA genome of the
     226       Prague C strain of RSV.
W--> 227 <400> SEQUENCE: 17
     228 ggcttcaggc caaaaggggt                20
     230 <210> SEQ ID NO: 18
     231 <211> LENGTH: 22
     232 <212> TYPE: DNA
     233 <213> ORGANISM: artificial sequence
W--> 234 <220> FEATURE:
     235 <221> NAME/KEY: primer_bind
     236 <222> LOCATION: 5858..5879
     237 <223> OTHER INFORMATION: Reverse primer PA20 specific for the detection of viral
     238       subgroup A of avian/leukosis sarcoma virus. Position
     239       corresponds to the numbering of the RNA genome of the
     240       Prague C strain of RSV.
W--> 241 <400> SEQUENCE: 18
     242 gtgcattgcc acagcggtac tg                22
     244 <210> SEQ ID NO: 19
     245 <211> LENGTH: 20
     246 <212> TYPE: DNA
     247 <213> ORGANISM: artificial sequence
W--> 248 <220> FEATURE:
     249 <221> NAME/KEY: primer_bind
     250 <222> LOCATION: 5642..5661
     251 <223> OTHER INFORMATION: Forward primer PB1 specific for the detection of viral
     252       subgroup A of avian/leukosis sarcoma virus. Position
     253       corresponds to the numbering of the RNA genome of the
     254       Prague C strain of RSV.
W--> 255 <400> SEQUENCE: 19
     256 ggctttaccc catacgatag                20
     258 <210> SEQ ID NO: 20
     259 <211> LENGTH: 21
     260 <212> TYPE: DNA
     261 <213> ORGANISM: artificial sequence
W--> 262 <220> FEATURE:
     263 <221> NAME/KEY: primer_bind
     264 <222> LOCATION: 5861..5882
     265 <223> OTHER INFORMATION: Reverse primer PB2 specific for the detection of viral
     266       subgroup A of avian/leukosis sarcoma virus. Position
     267       corresponds to the numbering of the RNA genome of the
     268       Prague C strain of RSV.
W--> 269 <400> SEQUENCE: 20
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VERIFICATION SUMMARY　　　　　　　　DATE: 06/14/2001
PATENT APPLICATION: **US/09/866,261**　　TIME: 11:17:21

Input Set : **N:\Crf3\RULE60\09866261.txt**
Output Set: **N:\CRF3\06142001\I866261.raw**

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L:6 M:283 W: Missing Blank Line separator, <130> field identifier
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L:24 M:283 W: Missing Blank Line separator, <400> field identifier
L:34 M:283 W: Missing Blank Line separator, <220> field identifier
L:36 M:283 W: Missing Blank Line separator, <400> field identifier
L:46 M:283 W: Missing Blank Line separator, <220> field identifier
L:48 M:283 W: Missing Blank Line separator, <400> field identifier
L:58 M:283 W: Missing Blank Line separator, <220> field identifier
L:60 M:283 W: Missing Blank Line separator, <400> field identifier
L:70 M:283 W: Missing Blank Line separator, <220> field identifier
L:72 M:283 W: Missing Blank Line separator, <400> field identifier
L:82 M:283 W: Missing Blank Line separator, <220> field identifier
L:85 M:283 W: Missing Blank Line separator, <400> field identifier
L:95 M:283 W: Missing Blank Line separator, <220> field identifier
L:99 M:283 W: Missing Blank Line separator, <400> field identifier
L:107 M:283 W: Missing Blank Line separator, <220> field identifier
L:111 M:283 W: Missing Blank Line separator, <400> field identifier
L:118 M:283 W: Missing Blank Line separator, <220> field identifier
L:120 M:283 W: Missing Blank Line separator, <400> field identifier
L:130 M:283 W: Missing Blank Line separator, <220> field identifier
L:132 M:283 W: Missing Blank Line separator, <400> field identifier
L:142 M:283 W: Missing Blank Line separator, <220> field identifier
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L:297 M:283 W: Missing Blank Line separator, <400> field identifier
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VERIFICATION SUMMARY   DATE: 06/14/2001
PATENT APPLICATION: **US/09/866,261**   TIME: 11:17:21

Input Set : **N:\Crf3\RULE60\09866261.txt**
Output Set: **N:\CRF3\06142001\I866261.raw**

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